

REMARKS

In accordance with the foregoing, the abstract and the specification have been amended. Claims 1-24 are pending, with claim 1 being independent. Claims 1-24 are under consideration and were rejected. No new matter is presented in this amendment.

The abstract and paragraphs [0014], [0038], and [0048] of the specification have been amended to agree with paragraph [0037] of the specification and claim 1 as originally filed.

Claims 1-2 and 13

Claims 1-2 and 13 were rejected under 35 USC 103(a) as being unpatentable over Tokito et al. (Tokito) (U.S. Patent No. 5,780,174) in view of Dodabalapur et al. (Dodabalapur (APL)) ("Color variation with electroluminescent organic semiconductors in multimode resonant cavities," *Applied Physics Letters*, Vol. 65, No. 18, October 31, 1994, pp. 2308-2310). This rejection is respectfully traversed.

The Examiner considers transparent conductive layer 14 in Fig. 1 of Tokito to be "a first anode layer formed on the semi-transparent layer as a predetermined pattern" as recited in independent claim 1. However, it is submitted that nothing whatsoever in Fig. 1 of Tokito or any other portion of Tokito discloses that transparent conductive layer 14 is formed "as a predetermined pattern" as recited in claim 1.

Tokito's transparent conductive layer 14 is shown only in cross section in the figures of Tokito, and no pattern is shown in these figures. The word "pattern" is used in Tokito only in the term "radiation pattern," such as with reference to Fig. 8.

Accordingly, for at least the reasons discussed above, it is submitted that Tokito does not disclose or suggest "a first anode layer formed on the semi-transparent layer as a predetermined pattern" as recited in claim 1.

The above arguments were also presented in the amendment of August 8, 2005. In responding to these arguments in the Office Action of November 2, 2005, the Examiner states that "predetermining the anode pattern, variable or otherwise, is inherent in the formation of an organic electroluminescent device." However, the Examiner did not provide a rationale or evidence tending to show inherency as he was required to do by MPEP 2112(IV), Eighth Edition,

Revision 3, August 2005, page 2100-57, which provides as follows in pertinent part (emphasis in original):

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). . . .

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). . . .

Here, it is submitted that Tokito's transparent conductive layer 14 is not necessarily formed "as a predetermined pattern" as recited in claim 1 because Tokito's organic electroluminescent device could be used as an LED as described on p. 2308 of Dodabalapur (APL) or as a back light in a light-valve based color display as described in the sentence bridging pp. 2309-2310 of Dodabalapur (APL), and it is not seen why it would be necessary to form Tokito's transparent conductive layer 13 "as a predetermined pattern" as recited in claim 1 if Tokito's device were used in these applications.

Accordingly, for at least the reasons discussed above, it is submitted that "a first anode layer formed on the semi-transparent layer as a predetermined pattern" as recited in claim 1 is not inherent in Tokito as alleged by the Examiner, such that Tokito does not disclose or suggest this feature of claim 1. Nor is it seen where this feature of claim 1 is disclosed or suggested by Dodabalapur (APL).

As recognized by the Examiner, Tokito does not disclose the feature of independent claim 1 "wherein an optical distance between a top surface of the semi-transparent layer and a

bottom of the cathode layer is determined to be a least integer multiple of half the peak wavelengths of light of a predetermined set of colors." However, the Examiner considers page 2310 of Dodabalapur (APL) to disclose this feature, and is of the opinion that it would have been obvious to incorporate the configuration of Dodabalapur (APL) into the device of Tokito "in order to provide a multicolor device with increased efficiency."

Although the Examiner did not identify the portion of page 2310 of Dodabalapur (APL) on which he is relying, it appears that the Examiner may be relying on the example shown in Fig. 4 on page 2309 of Dodabalapur (APL) in which three peaks corresponding to the tenth, ninth, and eighth modes are located at 488, 543, and 610 nm, and the thickness of the silicon nitride filler shown in Fig. 1 on page 2308 of Dodabalapur (APL) is 835 nm, resulting in a total optical thickness of about 2.5 μm as described on page 2310 of Dodabalapur (APL).

However, the Examiner has not explained how he considers this example of Dodabalapur (APL) to disclose the feature of claim 1 "wherein an optical distance between a top surface of the semi-transparent layer and a bottom of the cathode layer is determined to be a least integer multiple of half the peak wavelengths of light of a predetermined set of colors." It is submitted that this example of Dodabalapur (APL) merely discloses that an optical distance between a top surface of a semi-transparent layer and a bottom of a cathode layer is about 2.5 μm for peak wavelengths of 488, 543, and 610 nm corresponding to tenth, ninth, and eighth modes.

Accordingly, for at least the reasons discussed above, it is submitted that Dodabalapur (APL) does not disclose or suggest the feature of claim 1 "wherein an optical distance between a top surface of the semi-transparent layer and a bottom of the cathode layer is determined to be a least integer multiple of half the peak wavelengths of light of a predetermined set of colors."

Since Tokito and Dodabalapur (APL) do not disclose or suggest the features of claim 1 discussed above, it is submitted that claim 1 is patentable over these references, and it is respectfully requested that the rejection of claim 1 under 35 USC 103(a) as being unpatentable over Tokito in view of Dodabalapur (APL) be withdrawn.

With respect to claims 2 and 13, notwithstanding the position taken by the Examiner, it is noted that claims 2 and 13 depend from claim 1, and thus recite all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claims 2 and 13 are patentable over Tokito and Dodabalapur (APL) for at least the reasons discussed above that claim 1 is patentable thereover, and it is respectfully requested that the rejection of claims 2 and 13 under 35 USC 103(a) as being unpatentable over Tokito in view of Dodabalapur (APL) be withdrawn.

Claims 3-4

Claims 3-4 were rejected under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Dodabalapur et al. (Dodabalapur (USP)) (U.S. Patent No. 5,814,416). This rejection is respectfully traversed.

Notwithstanding the position taken by the Examiner, it is noted that claims 3-4 depend directly or indirectly from claim 1, and thus recite all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claims 3-4 are patentable over Tokito, Dodabalapur (APL), and Dodabalapur (USP) for at least the reasons discussed above that claim 1 is patentable over Tokito and Dodabalapur (APL), and it is respectfully requested that the rejection of claims 3-4 under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Dodabalapur (USP) be withdrawn.

Claims 5-6

Claims 5-6 were rejected under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Komatsu et al. (Komatsu) (U.S. Patent Application Publication No. 2003/0117070). This rejection is respectfully traversed.

Although the Examiner has relied on Komatsu in the rejection of claim 5, the Examiner's explanation of the rejection of claim 5 includes the phrase "to incorporate the second anode of Forrest et al." (emphasis added). It is presumed that this reference to Forrest et al. is an error, and was intended to be a reference to Komatsu. The applicants also pointed this out in the amendment of August 8, 2005, but the Examiner did not correct this error or otherwise respond to the applicants' comments about this error in the Office Action of November 2, 2005.

In any event, notwithstanding the position taken by the Examiner, it is noted that claims 5-6 depend directly or indirectly from claim 1, and thus recite all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claims 5-6 are patentable over Tokito, Dodabalapur (APL), and Komatsu for at least the reasons discussed above that claim 1 is patentable over Tokito and Dodabalapur (APL), and it is respectfully requested that the rejection of claims 5-6 under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Komatsu be withdrawn.

Claims 7 and 10

Claims 7 and 10 were rejected under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Ito et al. (Ito) (U.S. Patent No. 5,652,067). This rejection is respectfully traversed.

Notwithstanding the position taken by the Examiner, it is noted that claims 7 and 10 depend directly or indirectly from claim 1, and thus recite all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claims 7 and 10 are patentable over Tokito, Dodabalapur (APL), and Ito for at least the reasons discussed above that claim 1 is patentable over Tokito and Dodabalapur (APL), and it is respectfully requested that the rejection of claims 7 and 10 under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Ito be withdrawn.

Claims 8 and 11

Claims 8 and 11 were rejected under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Dodabalapur (USP) as applied to claim 3, and further in view of Ito. This rejection is respectfully traversed.

Notwithstanding the position taken by the Examiner, it is noted that claims 8 and 11 depend indirectly from claim 1, and thus recite all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claims 8 and 11 are patentable over Tokito, Dodabalapur (APL), Dodabalapur (USP), and Ito for at least the reasons discussed above that claim 1 is patentable over Tokito and Dodabalapur (APL), and it is respectfully requested that the rejection of claims 8 and 11 under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Dodabalapur (USP) as applied to claim 3, and further in view of Ito be withdrawn.

Claims 9 and 12

Claims 9 and 12 were rejected under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Komatsu as applied to claim 5, and further in view of Ito. This rejection is respectfully traversed.

Notwithstanding the position taken by the Examiner, it is noted that claims 9 and 12 depend indirectly from claim 1, and thus recite all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claims 9 and 12 are patentable over Tokito, Dodabalapur (APL), Komatsu, and Ito for at least the reasons discussed above that claim 1 is patentable over Tokito and Dodabalapur (APL), and it is respectfully requested that the rejection of claims 9 and 12 under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Komatsu as applied to claim 5, and further in view of Ito be withdrawn.

Claims 14-15

Claims 14-15 were rejected under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Shi et al. (Shi) (U.S. Patent No. 5,998,805). This rejection is respectfully traversed.

As recognized by the Examiner, Tokito does not disclose the feature of claim 14 "wherein the semi-transparent layer is a thin metal layer." However, the Examiner considers column 7, lines 31-32, of Shi to disclose a semi-transparent layer which is "a thin metal layer" as recited in claim 14, and is of the opinion that it would have been obvious to incorporate this semi-transparent layer into Tokito's device, presumably to replace multi-layered mirror 12 in Fig. 1 of

Tokito which the Examiner considers to correspond to the "semi-transparent layer" recited in claim 1, "in order to reduce the number of layers required to produce the device."

Fig. 1 and column 7, lines 26-38, of Shi disclose a specific embodiment of Shi's semi-transparent layer as being a combination of a gold layer 52 and an indium-tin-oxide layer 45.

However, as shown in Fig 1 and described in column 7, lines 26-38, of Shi, Shi's semi-transparent layer which is a thin metal layer is used as an anode layer in Shi's device, rather than as a mirror as is Tokito's multi-layered mirror 12. It is submitted that nothing whatsoever in Tokito and Shi suggests that Shi's semi-transparent layer which is a thin metal layer used as an anode layer would be suitable to replace the multi-layered mirror 12 in Fig. 1 of Tokito as apparently alleged by the Examiner. Rather, it is submitted that the only suggestion that this be done is contained in the applicants' disclosure wherein the applicants have disclosed that the "semi-transparent layer" recited in claim 1 may be "a thin metal layer" as recited in claim 14.

However, the Examiner is prohibited from relying on the applicants' disclosure in a rejection under 35 USC 103(a) pursuant to MPEP 2143, Eighth Edition, Revision 3, August 2005, page 2100-135, which provides as follows (emphasis added):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. (Citation omitted.)

Accordingly, for at least the reasons discussed above, it is submitted that Tokito, Dodabalapur (APL), and Shi do not disclose or suggest the feature of claim 14 "wherein the semi-transparent layer is a thin metal layer."

The above arguments were also presented in the amendment of August 8, 2005. In responding to these arguments in the Office Action of November 2, 2005, the Examiner states "see also USPN 5283692 of Herbst, lines 24-25 for support of motivation."

With respect to Herbst (U.S. Patent No. 5,283,692) newly relied on by the Examiner, it is noted that the Examiner has not cited Herbst on a form PTO-892 and Herbst is not otherwise of record. Accordingly, it is respectfully requested that the Examiner cite Herbst on a form PTO-892 in the next Office Action.

Furthermore, the Examiner did not include Herbst in the statement of the rejection as the Examiner was required to do by MPEP 706.02(j), Eighth Edition, Revision 3, August 2005, page 700-48, which provides as follows in pertinent part:

Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch*, 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970).

Footnote 3 in *In re Hoch* cited in MPEP 706.02(j) reads as follows:

There are two other cited references:

Newcomer 3,014,965 Dec. 26, 1961 (filed Apr. 29, 1955)

Newcomer 3,253,900 May 31, 1966 (filed May 15, 1961)

Appellant complains that although neither of these patents is mentioned in the statement of either of the appealed rejections and although this fact was pointed out in appellant's brief below, the board approved of their use by the examiner "as suggesting that [appellant's] compounds would exert herbicidal action" and characterizing this as a use in a "*minor capacity*" (emphasis added) to "further support the rejection." Appellant's complaint seems to be justified, and if we did not find the rejections based *solely* on Molotsky and the French patent to be sound, we might well feel constrained to reverse the decision of the board. Where a reference is relied on to support a rejection, whether or not in a "*minor capacity*," there would appear to be no excuse for not positively including the reference in the statement of rejection.

In light of the above, it is submitted that the Examiner was required to include Herbst in the statement of the rejection, and that the Examiner cannot rely on Herbst until he has done so. Accordingly, it is respectfully requested that the Examiner include Herbst in the statement of the rejection of claims 14-15 in the next Office Action should the Examiner decide to repeat this rejection. However, it is submitted that including Herbst in the statement of the rejection will constitute a new ground of rejection of claims 14-15, such that the Examiner will not be able to

make the next Office Action final if it includes such a rejection because claims 14-15 have never been amended.

Furthermore, the Examiner did not specify which lines 24-25 of Herbst the Examiner is relying on. That is, Herbst has ten columns each having lines 24-25, and the Examiner did not specify which column of Herbst he is referring to. Furthermore, the applicants have reviewed lines 24-25 in each of columns 1-10 of Herbst, and do not see how either of these lines 24-25 provide motivation for one of ordinary skill in the art to replace the multi-layered mirror 12 in Fig. 1 of Tokito with Shi's semi-transparent layer which is a thin metal layer used as an anode layer as apparently suggested by the Examiner to provide the feature of claim 14 "wherein the semi-transparent layer is a thin metal layer."

Accordingly, for at least the reasons discussed above, it is submitted that Tokito, Dodabalapur (APL), and Shi do not disclose or suggest the feature of claim 14 "wherein the semi-transparent layer is a thin metal layer."

Since Tokito, Dodabalapur (APL), and Shi do not disclose or suggest the feature of claim 14 discussed above, it is submitted that claim 14 is patentable over these references, and it is respectfully requested that the rejection of claim 14 under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Shi be withdrawn.

With respect to claim 15, notwithstanding the position taken by the Examiner, it is noted that claim 15 depends from claim 14, and thus recites all of the features recited in claim 14 together with further features of the present invention.

Accordingly, it is submitted that claim 15 is patentable over Tokito, Dodabalapur (APL), and Shi for at least the reasons discussed above that claim 14 is patentable thereover, and it is respectfully requested that the rejection of claim 15 under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Shi be withdrawn.

Claim 16

Claim 16 was rejected under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Shi as applied to claim 14, and further in view of Ueno et al. (Ueno) (U.S. Patent No. 6,228,457). This rejection is respectfully traversed.

As recognized by the Examiner, Tokito does not disclose the feature of claim 16 "wherein the thin metal layer is formed of one of a silver-copper-gold alloy and a silver-palladium-copper alloy." However, the Examiner considers column 2, lines 40-43, of Ueno to disclose a thin metal layer formed of a silver-palladium-copper alloy, and is of the opinion that it would have been obvious to incorporate this thin metal layer into Tokito's device, presumably to replace multi-layered mirror 12 in Fig. 1 of Tokito which the Examiner considers to correspond to the "semi-transparent layer" recited in claim 14 from which claim 16 depends, "in order to prevent degradation of the device" as described in column 2, lines 55-67, of Ueno.

However, Ueno's device is an optical data storage medium such as a DVD, while Tokito's device is an organic electroluminescent device. It is submitted that nothing whatsoever in Tokito and Ueno discloses or suggests that Tokito's multi-layered mirror 12 suffers from any of the degradation problems discussed in column 2, lines 55-67, of Ueno relied on by the Examiner that Ueno's thin metal layer formed of a silver-palladium-copper alloy is designed to solve.

Accordingly, it submitted that nothing whatsoever in Tokito or Ueno suggests that Ueno's thin metal layer formed of a silver-palladium-copper alloy is suitable to replace Tokito's multi-layered mirror 12 as apparently alleged by the Examiner. Rather, it is submitted that the only suggestion that this be done is contained in the applicants' disclosure wherein the applicants have disclosed that the "thin metal layer" recited in claim 14 may be "formed of one of a silver-copper-gold alloy and a silver-palladium-copper alloy" as recited in claim 16.

However, the Examiner is prohibited from relying on the applicants' disclosure in a rejection under 35 USC 103(a) pursuant to MPEP 2143 as discussed above in connection with claim 14.

Accordingly, for at least the reasons discussed above, it is submitted that Tokito, Dodabalapur (APL), Shi, and Ueno do not disclose or suggest the feature of claim 16 "wherein the thin metal layer is formed of one of a silver-copper-gold alloy and a silver-palladium-copper alloy."

The above arguments were also presented in the amendment of August 8, 2005, but the Examiner did not respond to these arguments in the Office Action of November 2, 2005.

Since Tokito, Dodabalapur (APL), Shi, and Ueno do not disclose or suggest the feature of claim 16 discussed above, it is submitted that claim 16 is patentable over these references, and it is respectfully requested that the rejection of claim 16 under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Shi as applied to claim 14, and further in view of Ueno be withdrawn.

Claims 17-18

Claims 17-18 were rejected under 35 USC 103(a) as being unpatentable over Tokito and Dodabalapur (APL) as applied to claim 1, and further in view of Himeshima et al. (Himeshima) (U.S. Patent No. 6,469,439). This rejection is respectfully traversed.

With respect to claim 17, notwithstanding the position taken by the Examiner, it is noted that claim 17 depends from claim 1, and thus recites all of the features recited in claim 1 together with further features of the present invention.

Accordingly, it is submitted that claim 17 is patentable over Tokito, Dodabalapur (APL), and Himeshima for at least the reasons discussed above that claim 1 is patentable over Tokito and Dodabalapur (APL), and it is respectfully requested that the rejection of claim 17 under 35 USC 103(a) as being unpatentable over Tokito in view of Dodabalapur (APL) as applied to claim 1, and further in view of Himeshima be withdrawn.

With respect to claim 18, as recognized by the Examiner, Tokito does not disclose or suggest the feature of claim 18 "wherein the first anode layer is formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of the first anode layer." However, the Examiner considers column 5, line 27, through column 6, line 18, and elements 8, 6, and 2 in Figs. 10-12 of Himeshima to disclose this feature, and is of the opinion that it would have obvious to incorporate this configuration into Tokito's device "in order to provide a plurality of luminescent regions" based on column 5, lines 19-20, of Himeshima.

However, according to column 6, lines 14-18, of Himeshima, first electrodes 2 in Figs. 10-12 of Himeshima are anodes and second electrodes 8 in Himeshima are cathodes, and as

can be seen from Fig. 10 of Himeshima and as described in column 5, lines 13-17, of Himeshima, anodes 2 and emitting (organic) layer 6 are formed as a stripe pattern, and cathodes 8 are formed as a stripe pattern perpendicular to the stripe pattern of anodes 2 and emitting (organic) layer 6, rather than anodes 2 being formed as a stripe pattern, and emitting (organic) layer 6 and cathodes 8 being formed as a stripe pattern perpendicular to the stripe pattern of anodes 2 as would be required to provide the feature of claim 18 "wherein the first anode layer is formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of the first anode layer."

Accordingly, for at least the reasons discussed above, it is submitted that Tokito, Dodabalapur (APL), and Himeshima do not disclose or suggest the feature of claim 18 "wherein the first anode layer is formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of the first anode layer."

Arguments substantially the same as the above arguments were also presented in the amendment of August 8, 2005. In responding to these arguments in the Office Action of November 2, 2005, the Examiner states "column 5, line 27 – column 6, line 18, and 8,6,2 of figs 10,11,12 – note indication that first electrodes may be anodes or cathodes, with the second electrodes being cathodes or anodes, as appropriate."

However, the Examiner did not identify where Himeshima discloses that "first electrodes may be anodes or cathodes, with the second electrodes being cathodes or anodes, as appropriate." Himeshima only mentions anodes and cathodes in connection with first electrodes and second electrodes in two places—column 1, lines 25-29, and column 6, lines 14-18.

Column 1, lines 25-29, of Himeshima reads as follows:

FIG. 37 is a sectional view showing a typical structure of an organic luminescent element. A hole transport layer 5, an organic emitting layer 6 and second electrodes (cathodes) 8 are laminated on transparent first electrodes (anodes) 2 formed on a glass substrate 1. . . .

As is readily apparent, this passage specifically says that the first electrodes are anodes and the second electrodes are cathodes, and thus does not disclose that "first electrodes may be anodes or cathodes, with the second electrodes being cathodes or anodes, as appropriate."

Column 6, lines 14-18, of Himeshima is part of a longer passage in column 6, lines 14-35, which reads as follows:

The second electrode material is not especially limited either. When ITO is used as the first electrodes, the second electrodes are required to function as cathodes to allow efficient injection of electrons into the organic electroluminescent elements since ITO functions generally as anodes. Therefore, as the second electrode material, a low work function metal such as an alkali metal can also be used, but considering the stability of electrodes, it is preferable to use a metal such as platinum, gold, silver, copper, iron, tin, aluminum, magnesium or indium, etc., or an alloy consisting of any of these metals and a low work function metal. Furthermore, stable electrodes can also be obtained with a high electron injection efficiency kept, by doping a slight amount of a low work function metal into the thin film layer of organic electroluminescent elements or forming a layer of a metal salt such as lithium fluoride thinly on the thin film layer beforehand, and subsequently forming second electrodes of a relatively stable metal. The method for forming the second electrodes is not especially limited either as far as it is a dry process such as resistance heating evaporation, electron beam evaporation, sputtering evaporation or ion plating.

To paraphrase the second sentence of this passage, ITO functions generally as an anode, so that when ITO is used for the first electrodes, the first electrodes function as anodes, which means that the second electrodes must function as cathodes. The rest of this passage gives examples of various materials that can be used for the second electrodes functioning as cathodes, and various methods that can be used to form the second electrodes. It is submitted that nothing in this passage contemplates a situation in which the first electrodes are cathodes and the second electrodes are anodes. Accordingly, it is submitted that this passage does not disclose that "first electrodes may be anodes or cathodes, with the second electrodes being cathodes or anodes, as appropriate."

For at least the reasons discussed above, it is submitted that Himeshima does not disclose that "first electrodes may be anodes or cathodes, with the second electrodes being cathodes or anodes, as appropriate" as alleged by the Examiner, such that Tokito, Dodabalapur (APL), and Himeshima do not disclose or suggest the feature of claim 18 "wherein the first anode layer is formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of the first anode layer."

Since Tokito, Dodabalapur (APL), and Himeshima do not disclose or suggest the feature of claim 18 discussed above, it is submitted that claim 18 is patentable over these references, and it is respectfully requested that the rejection of claim 18 under 35 USC 103(a) as being unpatentable over Tokito in view of Dodabalapur (APL) as applied to claim 1, and further in view of Himeshima be withdrawn.

Claims 19-20

Claims 19-20 were rejected under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Himeshima as applied to claims 1 and 17-18, and further in view of Inoguchi et al. (Inoguchi) (U.S. Patent No. 5,932,327). This rejection is respectfully traversed.

The Examiner considers multi-layered mirror 12 in Fig 1 of Tokito to correspond to the "semi-transparent layer" recited in claim 1 from which claims 19-20 depend. However, as recognized by the Examiner, Tokito does not disclose or suggest the feature of claims 19-20 "wherein the semi-transparent layer . . . [is] formed as a stripe pattern."

However, the Examiner considers Fig. 2 of Inoguchi to show a semi-transparent layer (red color filter) 9 formed as a stripe pattern, and is of the opinion that it would have been obvious to form semi-transparent layer (multi-layered mirror 12) in Fig. 1 of Tokito "as a stripe pattern" as recited in claims 19-20 based on this teaching of Inoguchi.

However, it is readily apparent that Inoguchi's red color filter 9 and Tokito's multi-layered mirror 12 perform completely different functions, and it is submitted that nothing whatsoever in Tokito and Inoguchi would have motivated one of ordinary skill in the art to make the modification proposed by the Examiner. Rather, it is submitted that the only suggestion that this be done is contained in the applicants' disclosure, which the Examiner is prohibited from relying on in a rejection under 35 USC 103(a) by MPEP 2143 as discussed above in connection with claim 14.

Accordingly, for at least the reasons discussed above, it is submitted that Tokito, Dodabalapur (APL), Himeshima, and Inoguchi do not disclose or suggest the feature of claims 19-20 "wherein the semi-transparent layer . . . [is] formed as a stripe pattern."

The above arguments were also presented in the amendment of August 8, 2005, but the Examiner did not respond to these arguments in the Office Action of November 2, 2005.

It is submitted that Tokito, Dodabalapur (APL), Himeshima, and Inoguchi do not disclose or suggest the feature of claim 20 "wherein . . . the first anode layer [is] formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of . . . the first anode layer" for at least the reasons discussed above in connection with claim 18 which recites this same feature.

Since Tokito, Dodabalapur (APL), Himeshima, and Inoguchi do not disclose or suggest the features of claims 19-20 discussed above, it is submitted that claims 19-20 are patentable over these references, and it is respectfully requested that the rejection of claims 19-20 under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), and Himeshima as applied to claims 1 and 17-18, and further in view of Inoguchi be withdrawn.

Claims 21-22

Claims 21-22 were rejected under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), Dodabalapur (USP), Himeshima, and Inoguchi as applied to claims 3, 17, and 19, and further in view of Himeshima. This rejection is respectfully traversed.

As recognized by the Examiner, Tokito does not disclose "a transparent spacer layer between the semi-transparent layer and the first anode layer" as recited in claim 3 from which claims 21-22 depend. However, the Examiner considers filler layer 16 in Fig. 1 of Dodabalapur (USP) to be "a transparent spacer layer" as recited in claim 3, and is of the opinion that it would have been obvious to incorporate Dodabalapur (USP)'s filler layer 16 into Tokito's device "in order to optimize the distance between the reflecting layers without changing the thickness of the anode or emitting layers."

As recognized by the Examiner, Tokito and Dodabalapur (USP) do not disclose or suggest the feature of claims 21-22 "wherein . . . the transparent spacer layer . . . [is] formed as a stripe pattern."

However, the Examiner considers Fig. 10 of Himeshima to show a spacer layer (spacer) 3 formed as a stripe pattern, and is of the opinion that it would have been obvious to form transparent spacer layer (filler layer 16) in Fig. 1 of Dodabalapur (USP) incorporated into Tokito's device "as a stripe pattern" as recited in claims 21-22 based on this teaching of Himeshima.

However, it is readily apparent that Himeshima's spacer 3 and Dodabalapur (USP)'s filler layer 16 perform completely different functions, and it is submitted that nothing whatsoever in Dodabalapur (USP) and Himeshima would have motivated one of ordinary skill in the art to make the modification proposed by the Examiner. Rather, it is submitted that the only suggestion that this be done is contained in the applicants' disclosure, which the Examiner is prohibited from relying on in a rejection under 35 USC 103(a) by MPEP 2143 as discussed above in connection with claim 14.

Accordingly, for at least the reasons discussed above, it is submitted that Tokito, Dodabalapur (APL), Dodabalapur (USP), Himeshima, Inoguchi, and Himeshima do not disclose or suggest the feature of claims 21-22 "wherein . . . the transparent spacer layer . . . [is] formed as a stripe pattern."

Arguments substantially the same as the above arguments were also presented in the amendment of August 8, 2005, but the Examiner did not respond to these arguments in the Office Action of November 2, 2005.

It is submitted that Tokito, Dodabalapur (APL), Dodabalapur (USP), Himeshima, Inoguchi, and Himeshima do not disclose or suggest the feature of claims 21-22 "wherein the semi-transparent layer . . . [is] formed as a stripe pattern" for at least the reasons discussed above in connection with claims 19-20 which recite this same feature.

It is submitted that Tokito, Dodabalapur (APL), Dodabalapur (USP), Himeshima, Inoguchi, and Himeshima do not disclose or suggest the feature of claim 22 "wherein . . . the first anode layer [is] formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of . . . the first anode layer" for at least the reasons discussed above in connection with claim 18 which recites this same feature.

Since Tokito, Dodabalapur (APL), Dodabalapur (USP), Himeshima, Inoguchi, and Himeshima do not disclose or suggest the features of claims 21-22 discussed above, it is submitted that claims 21-22 are patentable over these references, and it is respectfully requested that the rejection of claims 21-22 under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), Dodabalapur (USP), Himeshima, and Inoguchi as applied to claims 3, 17, and 19, and further in view of Himeshima be withdrawn.

Claims 23-24

Claims 23-24 were rejected under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), Komatsu, Himeshima, and Inoguchi as applied to claims 5, 17, and 19, and further in view of Komatsu. This rejection is respectfully traversed.

The Examiner considers first ITO layer 12 in Fig. 7 of Komatsu to correspond to "a second anode layer between the transparent substrate and the semi-transparent layer" as recited in claim 5 from which claims 23-24 depend, and is of the opinion that it would have been obvious to incorporate Komatsu's first ITO layer 12 into Tokito's device "in order to increase the number of holes contributing to light emission." Fig. 7 of Komatsu shows that first ITO layer 12 which the Examiner considers to be "a second anode layer" as recited in claim 5 is formed as a stripe pattern parallel to second ITO layer 14 which may be considered to be a first anode layer for the purposes of this discussion.

In light of this parallel relationship, it is submitted that Tokito, Dodabalapur (APL), Komatsu, Himeshima, Inoguchi, and Komatsu do not disclose or suggest the feature of claim 24 "wherein the second anode layer . . . and the first anode layer are formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of the first anode layer" for at least substantially the same reasons discussed above in connection with claim 18 which recites the similar feature "wherein . . . the first anode layer [is] formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of the second anode layer. . . and the first anode layer."

It is submitted that Tokito, Dodabalapur (APL), Komatsu, Himeshima, Inoguchi, and Komatsu do not disclose or suggest the feature of claims 23-24 "wherein . . . the semi-transparent layer . . . [is] formed as a stripe pattern" for at least the reasons discussed above in connection with claims 19-20 which recite this same feature.

It is submitted that Tokito, Dodabalapur (APL), Komatsu, Himeshima, Inoguchi, and Komatsu do not disclose or suggest the feature of claim 24 "wherein . . . the first anode layer [is] formed as a stripe pattern, and the organic layer and the cathode layer are formed as a stripe pattern perpendicular to the stripe pattern of . . . the first anode layer" for at least the reasons discussed above in connection with claim 18 which recites this same feature.

Since Tokito, Dodabalapur (APL), Komatsu, Himeshima, Inoguchi, and Komatsu do not disclose or suggest the features of claims 23-24 discussed above, it is submitted that claims 23-24 are patentable over these references, and it is respectfully requested that the rejection of claims 23-24 under 35 USC 103(a) as being unpatentable over Tokito, Dodabalapur (APL), Komatsu, Himeshima, and Inoguchi as applied to claims 5, 17, and 19, and further in view of Komatsu be withdrawn.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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